# U.S. ENVIRONMENTAL PROTECTION AGENCY POLLUTION/SITUATION REPORT Bayou Teche Oil Spill - Removal Polrep Final Removal Polrep



# UNITED STATES ENVIRONMENTAL PROTECTION AGENCY Region VI

Subject: POLREP #6

Final

**Bayou Teche Oil Spill** 

Jeanerette, LA

Latitude: 29.9166316 Longitude: -91.6623617

To:

From: Mark Hayes, OSC

**Date:** 4/12/2016

**Reporting Period:** 04/05/2016 - 04/12/2016

#### 1. Introduction

# 1.1 Background

Site Number: Contract Number:

D.O. Number: Action Memo Date:

Response Authority: OPA Response Type: Emergency
Response Lead: EPA Incident Category: Removal Action

NPL Status: Non NPL Operable Unit:

 Mobilization Date:
 3/29/2016
 Start Date:
 3/29/2016

 Demob Date:
 4/4/2016
 Completion Date:
 4/12/2016

CERCLIS ID: RCRIS ID:

ERNS No.: State Notification:

FPN#: E16608 Reimbursable Account #:

## 1.1.1 Incident Category

OPA Spill Response

## 1.1.2 Site Description

At 2010 on March 28, 2016, PSC Industrial Outsourcing (PSC) notified the National Response Center of a 50-barrel oil spill that impacted Bayou Teche near the town of Jeanerette, St. Mary Parish, Louisiana. The NRC assigned the incident report # 1143935. PSC indicated the spill was a result of an equipment failure at the PSC Industrial Resources facility located at 9523 LA Hwy 87, Jeanerette, St. Mary Parish, Louisiana.

PSC has indicated that crude oil discharged from the top hatch of the southernmost 2,000 barrels (bbl) crude oil above ground storage tank (AST). A valve linking a 10,000-bbl crude oil AST to the 2,000-bbl

crude oil AST was reported to have malfunctioned, allowing oil to gravity feed into the smaller (and lower) AST. The AST overflowed into the secondary containment, and exited through an open storm water drain which had been opened on the morning of the 28th, to release rainwater which had accumulated from recent rainfall. The spilled oil flowed downhill through a drainage ditch into Bayou Teche. The actual amount of spilled oil was later estimated to be approximately 300 bbls.

#### **1.1.2.1 Location**

The oil spill occurred at the PSC facility which received produced water and oil from oil and gas exploration operations. The facility has an EPA Facility Response Plan (R6-LA-1487). The facility reclaims oil from produced water, as well as purchasing small quantities of crude oil from production companies. Produced water and crude oil is delivered primarily by tanker truck, and to a lesser extent barges. Materials are offloaded at the facility's transfer rack and dock, and pumped into tanks located within the facility. Produced water is stored within 3 10,000-barrel (bbl) above ground storage (AST) tanks and is injected into the facilities salt water disposal well (SN 972558). Residual oil is skimmed from the stored water and transferred to one of 5 crude oil ASTs (2 10,000-bbl, 3 2,000-bbl) located within the facility. Purchased oil is also stored within the crude oil ASTs. The ASTs are located within a secondary containment berm. The facility is manned during normal working hours, approximately 7 AM until 5 PM. The facility is located approximately 400 feet north, and up gradient, of Bayou Teche, which flows southeast to the Charenton Navigation Canal, which flows south into the Gulf of Mexico. Bayou Teche is tidally influenced and has a relatively slow current. The affected section of Bayou Teche is situated east/west with flow traveling towards the east. The spill is located within the banks of Bayou Teche, and is bordered by woodlands and agricultural fields to the north and residential properties to the south. The nearest resident is located approximately 500 feet southeast of the spill site and multiple residents (approximately 30) are located within 150-300 feet of the affected area of the Bayou.

# 1.1.2.2 Description of Threat

As defined by the NCP the spill is a Major inland spill. PSC has revised its estimates up to an estimated 300-bbls. The spilled oil has affected approximately 2 miles of the bayou, with approximately 15% of that area covered from bank to bank with oil. The remaining sections of the bayou have oil coverage ranging from sheen to large pools of oil.

Bayou Teche flows southeast approximately 9.3 miles were it meet the Charenton Navigation Canal. The Charenton Canal continues to flow south 8 miles into the Gulf of Mexico. Bayou Teche, as well as the Charenton Canal meet the meet the definition of "navigable waters" of the United States (US) as defined in Section 502(7) of the Federal Water Pollution Control Action (FWPCA).

#### 1.1.3 Preliminary Removal Assessment/Removal Site Inspection Results

#### 2. Current Activities

# 2.1 Operations Section

# 2.1.1 Narrative

#### 2.1.2 Response Actions to Date

Following the discovery of the oil spill on March 28, 2016, the RP (PSC Industrial Outsourcing, Inc.) began oil spill response operations. The RP's initial oil spill response mainly consisted of oil containment within the bayou to prevent further migration of the oil. The RP contained the spilled oil within an estimated 2 miles of the bayou through deployment of containment and adsorbent boom at 1 location upstream and 4 locations downstream of the spill site.

The United States Coast Guard (USCG) reported that they mobilized to the incident upon receiving the report from the NRC. They assumed the first federal official on scene until EPA could mobilize to the scene. The USCG notified the cities of Charenton and Franklin to ensure that they took necessary precaution to prevent drinking water intakes from being impacted. The Louisiana State Police (LSP) was on scene and issued a shelter in place for residents along Bayou Teche between the upper and lower

booms. Also on scene was the City of Lafayette's Hazmat team that conducted air monitoring. NOAA provided USCG trajectory maps that showed potential downstream impacts of the oil. USFW provided USCG a IPaC Trust Resources Report that identified endangered and threatened and endangered species that could be impacted.

EPA mobilized to the incident on March 29. EPA's START-3 contractor was also mobilized to observe and document the oil spill response activities and assist EPA with the response. A transition from first federal official to the FOSC occurred once EPA arrived on scene. When EPA arrived, EPA's FOSC engaged with Unified Command which included representatives from the USCG, Louisiana Oil Spill Coordinators Office (LOSCO), and the RP. Assisting agencies included Louisiana State Police (LSP), Louisiana Department of Environmental Quality (LDEQ), Louisiana Department of Wildlife and Fisheries (LDWF), US Fish and Wildlife Service (USFWS) and National Oceanic and Atmospheric Administration NOAA.

From April 5 through April 11<sup>th</sup> the RP continued oil spill response activities within the four divisions established within Bayou Teche, recovery activities on the facility property, soil removal along the land portion of the spill pathway, and soil disposal operations. Operations began at approximately 0630 and continued until 1900. Weather during the period was conducive to operations, and no work stoppages were necessary. Night operations were not conducted. Assets deployed during the operational period include:

- 160 Responding personnel
  - 125 Field
  - · 35 Command Post
- 10 drum skimmers
- 10 Flush pumps
- · 24 Boats
- 2 Vacuum trucks
- 1 Excavator
- Approximately 6,450 feet of containment boom
- Adsorbent boom and pads

Division A is the furthest containment zone downstream of the spill. During the operational period, adsorbent materials were deployed and collected as needed. When small amounts of recoverable oil was discovered, the RP deployed adsorbent material recovery teams to the area and applied adsorbent boom and pads to the isolated pockets of oil. Response crews only utilized adsorbent recovery techniques in the division, no mechanical means were employed.

Division B is located upstream and adjacent to Division A. This division was the most heavily oiled, primarily along the northern shoreline. Crews worked throughout the reporting period, primarily along the shoreline, conducting washing operations, oiled debris collection, and utilizing adsorbents to recover oil. Oil washed from the banks of the bayou was directed towards boomed catch pockets, where drum skimmers removed the oil from the water surface. Washing operations utilized water emitted from an open ended (no spray nozzle) hose connected to a pump. The water was used to free oil from the shoreline, debris, and vegetation and direct the oil towards to the collection points. Adsorbent boom and pads were deployed along both the northern and southern shorelines and adjacent to containment boom. Oiled adsorbents and debris were collected, bagged, and transported to the PSC dock, where the bags were placed into roll-off containers. Adsorbents were replaced as necessary throughout the division.

Division C is located upstream and adjacent to Division B. The oil within the division is primarily located on the northern bank of the bayou, with a minor amount located along the southern shoreline. Crews worked throughout the reporting period, along the shoreline, conducting washing operations, oiled debris collection, and utilizing adsorbents to recover oil. Shoreline washing operations were conducted in a similar fashion as previously described. Oiled adsorbents and debris were collected, bagged, and transported to the PSC dock, where the bags were placed into roll-off containers. Adsorbents were replaced as necessary throughout the division during the operational period.

Division D includes the point of discharge and the furthest upstream containment boom. Very small amounts of visible sheen are present within the division and very small amounts of recoverable oil exist along the shoreline. Crews have utilized adsorbent pads to remove visible oil. Very little on water or shoreline activities were conducted (or required) within Division D.

Response personnel continued to utilize an excavator to remove contaminated soil from the spill pathway. Approximately 512yd³ has been excavated and placed within 25-yd³ roll-off boxes or staged on plastic sheeting. The RP contracted with Ecoserv landfill (29-B waste permitted landfill) in Morgan City, LA to dispose of oil-impacted soils. The RP began shipping materials to the waste facility on April 4, 2016, and has transported a total of 337yd³ to date.

The RP has contracted with Republic Services Colonial Landfill in Sorento, LA to dispose of the solid wastes (adsorbent material, oiled vegetation, and oiled debris) generated during the response action. Transportation of staged roll-off boxes began on April 6, and approximately 600yd<sup>3</sup> of oiled materials have been disposed of at the facility to date.

The LDWF has recovered the following:

- · 15 oiled reptiles, 13 released
- · 10 oiled amphibians, 9 released
- · 3 oiled birds, 2 died in facility
- 3 oiled invertebrates, 3 released.

Animals were secured, partial decontaminated, and transported to the recovery facility established at the AMPOL warehouse located in New Iberia, LA.

An assessment of the impacted area was conducted at 0930 April 11, 2016 by representatives of LOSCO, LDEQ, LDWF, RP, and response subcontractors to determine if the threat to human health and the environment had been mitigated to the extent at which the incident could be downgraded from emergency to maintenance. All parties agreed that the conditions warranted moving the incident to a maintenance category.

#### 2.1.3 Enforcement Activities, Identity of Potentially Responsible Parties (PRPs)

The Responsible Partly associated with the spill scene is PSC Industrial Resources, Inc., P.O. Box 132 Jeanerette, Louisiana. A Notice of Federal Interest was issued to PSC on March 30, 2016.

## 2.1.4 Progress Metrics

Upon delivery to the PSC facility recovered oil and water is tested to determine the amount of oil present. Totals are listed as unknown until test results are received. Bagged oiled debris and adsorbent material volumes calculations are conducted upon inspection by the waste management personnel.

Date	Oil/Water (bbls)	Oil (bbls)	Disposal Location Liquids	Soil (yds3)	Soil Disposal Facility	Adsorbent	Disposal Facility Solids
3/28/2016	60	60	PSC Facility				
3/29/2016	55	30	PSC Facility				
3/30/2016	60	40	PSC Facility			20	Colonial Sorrento
3/31/2016	93	33	PSC Facility			155	Colonial Sorrento
4/1/2016	74	7		62.5		28	Colonial Sorrento

			PSC Facility		Ecoserv, Morgan City		
4/2-4/2016	253	ノカ	PSC Facility	1 フイン ち	Ecoserv, Morgan City	59.5	Colonial Sorrento
4/5-11/2016	187	19	PSC Facility	237.5	Ecoserv, Morgan City	575	Colonial Sorrento
Total:	782	214		275		837.5	

# 2.2 Planning Section

# 2.2.1 Anticipated Activities

The RP has provided the Unified Command with a maintenance plan, including the following:

- Replacement of absorbent boom as needed
- · Recovering any residual oil that may accumulate after rainfall
- · Maintaining containment boom, and assessing when this boom may be removed
- · Installing "No Wake" buoys

Maintenance phase schedule will be as follows:

- · Land and containment berm will be assessed daily.
- Waterway maintenance will begin on Thursday April 14, and the next scheduled maintenance will be Monday, April 18<sup>th</sup>.
- A maintenance schedule will be instituted after Monday's maintenance and will be based upon what is visually observed during each maintenance event.

The RP plans to coordinate the reopening of the affected portions of Bayou Teche with USCG MSU Morgan City. Preliminary plans are to remove all containment boom and security on April 12, 2016 once the "No Wake" buoys are in place. Once the boom and security are removed, access will be allowed.

Equipment will continue to be gross decontaminated in the field and then transferred to either the PSC or AMPOL facility for final decontamination. Further decontamination of houseboats located on the affected portions of the bayou will be coordinated with the respective owners.

The RP has submitted a soil remediation and sampling plan to the LDEQ and is awaiting approval. Once approved the RP will conduct soil sampling activities to determine the next steps in the remedial process.

# 2.2.1.1 Planned Response Activities

Oil spill maintenance operations.

# 2.2.1.2 Next Steps

The next operational period will begin the maintenance phase of the incident and will be 30 days in duration. The RP plans to maintain existing oil containment and collection operations (adsorbents, containment boom, buoys, etc.) and continue to assess the situation to determine if additional resources are required. EPA does not anticipated any future field resources, but will continue to coordinate with state and local agencies.

## **2.2.2 Issues**

Louisiana Wildlife Fisheries (LWF) assessing potential impacts to endangered threatened species. None identified at this time.

# 2.3 Logistics Section

No information available at this time.

#### 2.4 Finance Section

#### 2.4.1 Narrative

EPA has opened a FPN for the incident. The current ceiling is \$50,000. The RP has established a claims hot line.

#### 2.5 Other Command Staff

# 2.5.1 Safety Officer

No information available at this time.

# 2.5.2 Liaison Officer

No information available at this time.

## 2.5.3 Information Officer

No information available at this time.

# 3. Participating Entities

No information available at this time.

# 4. Personnel On Site

Organization	Field	Command Post	Total On Scene
Federal			
State			
Local		1	1
RP	1	6	7
Contract Personnel	124	28	152
Volunteers			
Totals	125	35	160

# 5. Definition of Terms

No information available at this time.

# 6. Additional sources of information

No information available at this time.

## 7. Situational Reference Materials

No information available at this time.